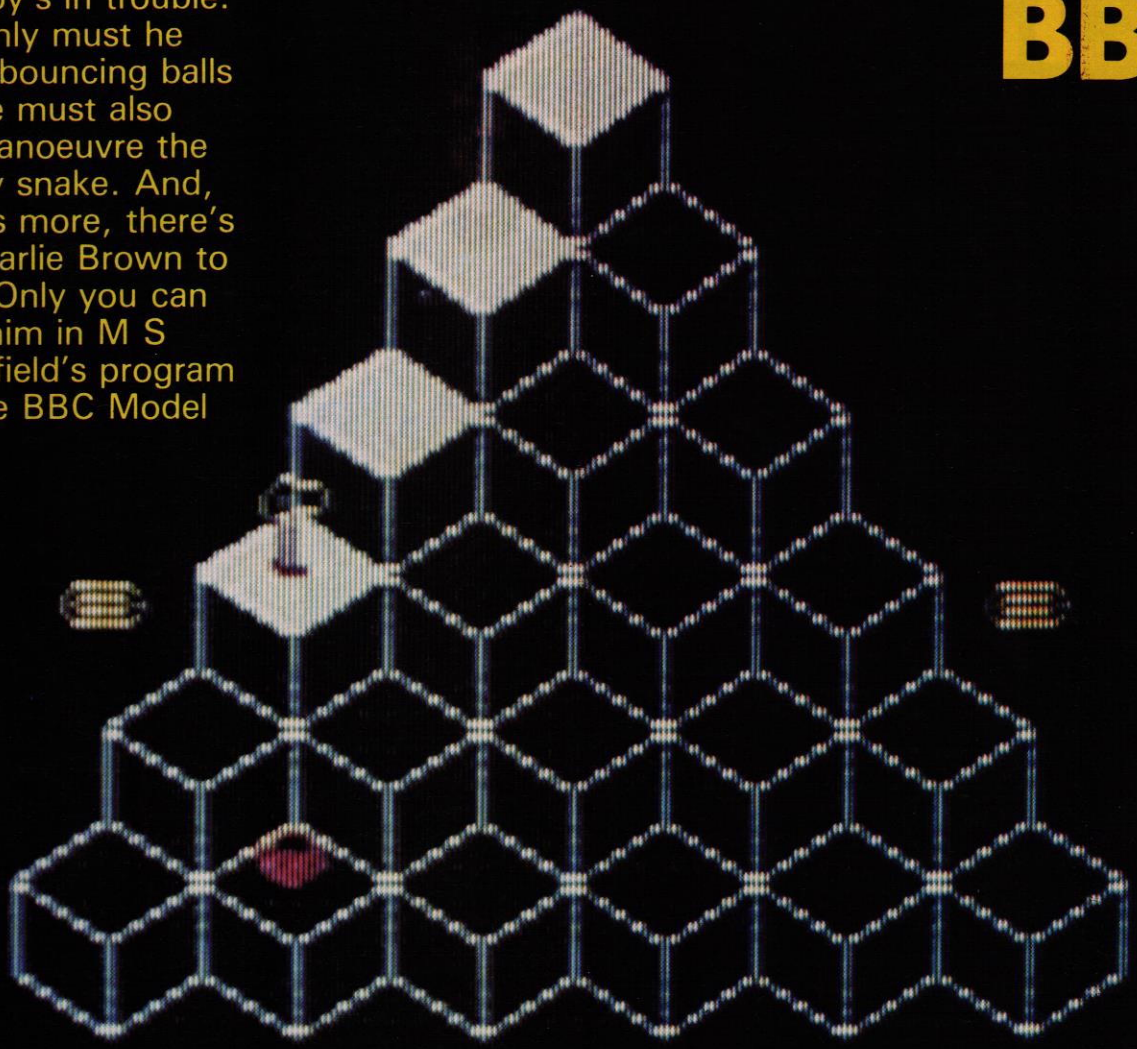
Snoopy's in trouble. Not only must he avoid bouncing balls but he must also out-manoeuvre the deadly snake. And, what's more, there's no Charlie Brown to help. Only you can save him in M S Wakefield's program for the BBC Model B.

BBC



SNOOPY

QUICK! JUMP ONTO another cube to avoid one of the relentless bouncing balls! But no! The dreaded springing serpent has emerged from the strange ball awaiting its chance at the bottom, and you must leap for a lift before he heads you off. He falls over the edge of the pyramid as you soar back towards the top on the elevator. That gives you a bit more time to fill in some of the cubes of which the pyramid is comprised.

For this is the idea of this new arcade game — your task is to jump onto each cube of the pyramid while avoiding the hazards. First, there are the remorseless bouncing balls, which tumble down the pyramid, deadly if not immediately assessed and nimbly avoided. The first ball is of a different colour and mission to the following ones — as it contains the notorious snake.

This ball waits at the bottom — awaiting its opportunity — until finally it vanishes leaving the snake, the second hazard. This follows you unremittingly. The only thing for it is to wait by one of the two lifts, until it is almost on you, and then jump onto the lift. The snake then follows you over the edge and falls to its death in the depths below. But this is not the last of the feared snakes as the next of the incessant balls changes colour and bears yet another.

When at last all the cubes have been visited, another layer with a whole new spectrum of colours is attained and as the layers progress, difficulty is increased. After three layers are completed, each cube must be visited twice before its top is filled.

Program 1.

```
   5VDU28,0,0,39,24
  10CLS:FORA=1TO2:PRINTCHR$(141);CHR$(129);CHR$(157);
CHR$(131);"      Instructions for Cubert":NEXTA
  20PRINT:PRINT:PRINT"CONTROLS: 'T'-UP LEFT"
  30PRINT:PRINT"            'Y'-UP RIGHT"
  40PRINT:PRINT"            'V'-DOWN LEFT"
  50PRINT:PRINT"            'B'-DOWN RIGHT"
  60PRINT:PRINT"MISSION:  Fill all cube tops."
  70PRINT:PRINT"ENEMIES:  Bouncing Balls,Snake."
  80PRINT:PRINT"TACTICS:  Avoid balls."
  90PRINT"                Lure snake over edge by
     attracting it and then                jumping
on lift."
 100VDU28,10,24,30,21
 110CHAIN"Cubert"
```

First type in program 1, and Save it as "CUBERT". This gives instructions to the game including keys to use, a brief rundown of the game and tactics to apply. Program 2 is then typed in, and Saved after program 1 as "Cubert". In future, when the first program is Chained, the second one will be Loaded and Run automatically.

This program is a full clear arcade-action game which fully uses the colours and Modes of the BBC Model B, including palette changes to employ all eight colours in conjunction with the high resolution of Mode 1. Also, using GCOL 3,X to EOR the existing colours smooth non-flicker pixel animation is obtained. The program includes full enjoyment of Envelope and sound channel 0, and

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also a high-score table which extensively utilises Mode 7 graphics and which records and displays the top eight scores and names.

Program 1 is a table, as previously explained, displayed while the main program is Loading. Program 2 is structured as follows:

10 to 210 Set up variables and screen.
220 to 400 Main loop.
410 to 490 Death and complete pyramid.
500 to 1690 Procedures:
500 to 570 Draw cubes.
580 to 880 Movement.
890 to 990 Death.
1000 to 1130 Cube top filling.
1140 to 1350 Ball movement and collision with man.
1360 to 1400 Check lifts.
1410 to 1610 Snake control.
1620 to 1690 Operate lifts.
1700 to 1850 Data.
1860 to 1920 Cube filling control.
1930 to 2000 Death of snake.
2010 to 2170 Hi-score display.

Use key T to move up left, Y to move up right, V to move down left, and B to move down right.

The program is not particularly short, but is easily worth the typing. If, nevertheless, you have not the stamina, energy or enough coffee in the jar to face the task of typing it in, then send £2 with your name and address to M.S. Wakefield, 7 Park Crescent, Retford, Notts, DN22 6UF for prompt dispatch of a cassette of the program.

Program 2.

```
10DIMA(10):DIMA$(10)
20FORA=1TO10:A(A)=100:A$(A)="":NEXTA
30VDU26:MODE1:VDU5:*FX11,0
40RESTORE1800:FORA=224TO237:READB,C,D,E,F,G,H,I:VDU
23,A,B,C,D,E,F,G,H,I:NEXT
50ENVELOPE1,129,2,-2,-2,15,10,5,8,8,8,8,120,60
60T=1:T1=3:T2=2
70L=T1
80U=4:SC=0:U1=SC
90RESTORE:GCOL0,3:FORA=1TO21:READB,C:PROCcube(B,C):
NEXT
100GCOL0,2:MOVE868,536:VDU236,237:MOVE268,536:VDU236
,237:VDU4
110COLOUR1:IFL>1THENPRINTTAB(38,1);:VDU224,225:PRINT
TAB(38,2);:VDU226,227
120IFL=3THENPRINTTAB(36,1);:VDU224,225:PRINTTAB(36,2
);:VDU226,227
130VDU5:*FX15,0
140GCOL3,2
150VDU19,1,T2;0;:VDU19,2,T1;0;
160N=0:N1=N:N2=N:N3=N:M=N:D=N
170X=0:Y=0:XB=568:YB=900:W=1:BALL=W
180SNX=0:SNY=0:S=0:SN=0
190PROCbounce
200X=568:Y=900
210PROCprint
220REPEAT
230K$=INKEY$(0)
240IFK$="B"THENPROCdownright
250IFK$="V"THENPROCdownleft
260IFK$="Y"THENPROCupright
270IFK$="T"THENPROCupleft
280IFPOINT(X+20,Y-44)=1THENPROCcrash
290IFM<>0THEN400
300IFU1=0THENPROCtop
310IFU1=1THENPROChalf
320IFN<>0THENPROCcheck
330IFYB<360THENPROCball:XB=568:YB=900:BALL=BALL+1
340VDU4:PRINTTAB(2,2);SC:VDU5
350PROCbounce
360IFBALL=1AND YB<460THENVDU19,1,T;0;:SNX=XB:SNY=YB:
XB=568:YB=900:BALL=BALL+1
370IFSN=20THENGCOL3,1:MOVESNX,SNY:VDU228,229:MOVESNX
,SNY-32:VDU230,231:GCOL3,2:PROCspring
380IFSN>19THENPROCsnake
390IFPOINT(X+20,Y-44)=1THENPROCcrash
400UNTILM<>0
410IFM=3THEN440
420IFM=2THEN2010
430CLS:GOTO90
440RESTORE1790
450IFU=10THENU1=1:U=1
460SC=SC+100*(U1+1)
470FORA=1TOU:READB:NEXTA
480READT,T1,T2
490U=U+3:CLS:GOTO90
500DEFPROCcube(X,Y)
510MOVEX,Y:DRAWX,Y-60:DRAWX-60,Y-100:DRAWX-60,Y-40
520DRAWX,Y:DRAWX-60,Y+40:DRAWX-120,Y:DRAWX-120,Y-60
530DRAWX-60,Y-100:DRAWX-60,Y-40:DRAWX-120,Y
540ENDPROC
550DEFPROCdownright
560IFY=400THENRESTORE1760:PROCdeath:ENDPROC
570RESTORE1720
580PROCmove
590ENDPROC
600DEFPROCdownleft
610IFY=400THENRESTORE1770:PROCdeath:ENDPROC
620RESTORE1730
630PROCmove
640ENDPROC
650DEFPROCupright
660IFX=808 AND Y=500ANDN1=0THENN=1:GOTO680
670IFPOINT(X+92,Y-20)<>3THENRESTORE1760:PROCdeath:EN
DPROC
680RESTORE1740
690PROCmove
700ENDPROC
710DEFPROCupleft
720IFX=328 AND Y=500ANDN2=0THENN=-1:GOTO740
730IFPOINT(X-28,Y-20)<>3THENRESTORE1770:PROCdeath:EN
DPROC
740RESTORE1750
750PROCmove
760ENDPROC
770DEFPROCmove
780W=0
790SOUND2,1,70,10
800IFN<>0AND N3=1THENPROCdeath:ENDPROC
810IFN<>0THENN3=1
820*FX15,1
830FORA=1TO5:READB,C
840PROCprint:X=X+B:Y=Y+C:PROCprint
850NEXT
860ENDPROC
870DEFPROCprint
880MOVEX,Y:VDU224,225:MOVEX,Y-32:VDU226,227:ENDPROC
890DEFPROCdeath
900FORA=1TO7:READB,C:PROCprint:X=X+B:Y=Y+C:PROCprint
:NEXT
910PROCprint
920Y=Y-30:MOVEX,Y:VDU224:VDU225:MOVEX,Y:VDU224:VDU22
5
930REPEAT
940Y=Y-16:IFY<240THENPROCprint:PROCprint
950SOUND1,-15,Y/5,1
960UNTILY<85
970M=1
980L=L-1:IFL=0THENM=2
990ENDPROC
1000DEFPROCfill
1010SC=SC+10
1020MOVEX+32,Y-100:MOVEX-28,Y-56
1030GCOL0,3
1040PLOT85,X+92,Y-58
1050GCOL3,2
1060ENDPROC
1070DEFPROCcover
1080IFU1=1THENSC=SC+40
1090MOVEX+32,Y-20:MOVEX-28,Y-56
1100GCOL0,3
1110PLOT85,X+92,Y-58
1120GCOL3,2
1130ENDPROC
1140DEFPROCbounce
1150IFX=XB ANDY=YB THENPROCcrash
1160RESTORE(1710+(RND(2)*10))
1170IFXB=568ANDYB=900THENPROCball
1180FORA=1TO5:READB,C
1190PROCball:XB=XB+B:YB=YB+C:PROCball
1200NEXT
1210SOUND0,-15,5,4
1220SN=SN+1
1230ENDPROC
1240DEFPROCball
1250GCOL3,1
1260IFPOINT(XB,YB-60)=3THENGCOL3,2
1270MOVEXB,YB:VDU228,229:MOVEXB,YB-32:VDU230,231
1280GCOL3,2
1290ENDPROC
1300DEFPROCcrash
1310ENVELOPE3,7,2,1,1,1,1,1,121,-10,-5,-2,120,120
1320SOUND1,3,53,20
1330M=1
1340L=L-1:IFL=0THENM=2
1350SN=0:ENDPROC
1360DEFPROCcheck
1370IFY=1000THENIFN=1ORN=-1THENN=N*?
1380IFN=1ORN=-1THENPROClift:ENDPROC
1390IFYB<900ANDYB>500THENIFN=2ORN=-2THENPROCarrive
1400ENDPROC
1410DEFPROCsnake
1420J=J+1:IFJ=2THENJ=0:ENDPROC
1430IFY>=SNY ANDX<=SNX THENRESTORE1750ELSEGOTO1470
1440IFPOINT(SNX+2,SNY+20)<>3THENRESTORE1770:PROCplop:
ENDPROC
1450PROCboing
1460ENDPROC
1470IFY>=SNY ANDX>SNX THENRESTORE1740ELSEGOTO1510
1480IFPOINT(SNX+62,SNY+20)<>3THENRESTORE1760:PROCplop
:ENDPROC
1490PROCboing
1500ENDPROC
1510IFY<SNY ANDX<=SNX THENRESTORE1730:PROCboing:ENDPR
OC
1520IFY<SNY ANDX>SNX THENRESTORE1720:PROCboing
1530ENDPROC
1540DEFPROCboing
1550FORA=1TO5:READB,C
1560PROCspring:SNX=SNX+B:SNY=SNY+C:PROCspring
1570NEXT
1580ENDPROC
1590DEFPROCspring
1600MOVESNX,SNY:VDU232:VDU233:MOVESNX,SNY-32:VDU234:V
DU235
1610ENDPROC
1620DEFPROClift
1630FORA=1TO5:PROCprint:MOVEX,Y-64:VDU236,237:X=X-(12
*N):Y=Y+20:MOVEX,Y:PROCprint:MOVEX,Y-64:VDU236,237:NEX
T
1640ENDPROC
1650DEFPROCarrive
1660N3=0:IFN=2THENN1=1ELSEN2=1
1670MOVEX,Y-64:VDU236,237
1680IFN=2THENN=0:GOTO620
1690N=0:GOTO570
1700DATA660,840,720,740,600,740,780,640,660,640,540,6
40,840,540,720,540,600,540,480,540,900,440
1710DATA780,440,660,440,540,440,420,440,960,340,840,3
40,720,340,600,340,480,340,360,340
1720DATA30,30,30,-30,0,-30,0,-30,0,-40
1730DATA-30,30,-30,-30,0,-30,0,-30,0,-40
1740DATA0,40,0,30,0,30,30,30,30,-30
1750DATA0,40,0,30,0,30,-30,30,-30,-30
1760DATA30,30,30,15,15,-15,15,-30,0,-30,0,-25,0,-25
1770DATA-30,30,-30,13,-15,-15,-15,-30,0,-30,0,-25,0,-
25
1780DATA53,5,-15,53,2,0,53,5,-15,73,10,-15,89,5,-15,1
2,5,0,149,5,-15,14,2,0,149,5,-15,169,10,-15,185,5,-15,
15,5,0
1790DATA0,1,3,2,6,1,5,4,6,3
1800DATA3,4,8,18,18,16,8,6,0,120,4,4,4,120,128,128,2,
2,2,2,2,4,7,3,128,128,128,128,128,128,128,224,224
1810DATA0,0,0,0,0,0,3,15,0,0,0,0,0,0,192,240,28,60,63
,63,63,31,15,3,56,60,252,252,252,248,240,192
1820DATA0,1,7,6,7,1,3,4,0,128,224,160,224,128,0,0,5,2
,5,4,5,2,5,0,192,32,192,0,192,32,192,0
1830DATA0,31,32,79,80,79,32,31,0,248,4,242,10,242,4,2
48
1840DATA0,31,48,119,112,31,0,0,0,248,12,206,14,248,0,
0
1850DATA0,-60,-60,-100,-60,-40,0,0,-60,40,-120,0,-120
,-60,-60,-100,-60,-40,-120,0
1860DEFPROCtop
1870IFPOINT(X,Y-60)=0ANDN=0THENPROCprint:PROCfill:PRO
Ccover:PROCprint:D=D+1:IFD=21THENM=3
1880ENDPROC
1890DEFPROChalf
1900IFPOINT(X,Y-65)=0ANDN=0THENPROCprint:PROCfill:PRO
Cprint:W=1
1910IFPOINT(X,Y-55)=0ANDN=0ANDW=0THENPROCprint:PROCco
ver:PROCprint:D=D+1:IFD=21THENM=3
1920ENDPROC
1930DEFPROCplop
1940SC=SC+50*(U1+1)
1950PROCspring:FORA=1TO6:READB,C:PROCspring:PROCsprin
g:SNX=SNX+B:SNY=SNY+C:NEXT
1960REPEAT
1970SNY=SNY-16:IFSNY<240THENPROCspring:PROCspring:IFS
NY<85THENBALL=0:SN=0:SNX=0:SNY=0
1980SOUND1,-15,SNY/5+50,1
1990UNTILBALL=0
2000ENDPROC
2010MODE7:VDU4:PRINTTAB(15,12);"GAME OVER":FORA=1TO50
00:NEXTA:B=10:*FX15,0
2020B$="":FORA=1TO10
2030IFSC>A(A)THENB=A:A=10
2040NEXTA
2050FORA=10TOB STEP-1:A(A)=A(A-1):A$(A)=A$(A-1):NEXTA
2060A(B)=SC:A$(B)=""
2070CLS:FORA=1TO2:PRINTCHR$(141);CHR$(129);CHR$(157);
CHR$(131);"       Cubert Hall of Fame":NEXTA
2080PRINT:FORA=1TO2:PRINTCHR$(141);CHR$(134);"
 Today's Greatest":NEXTA
2090FORA=1TO8:PRINTTAB(5,2*A+4);A;".";
2100PRINTA(A);" ... ";A$(A):NEXTA
2110IFB>8THENPRINT:PRINT:PRINTCHR$(134);"   Press (SP
ACE BAR) to play again":GOTO2160
2120PRINT:PRINT:PRINT;CHR$(134);"    Please enter you
r name"
2130PRINTTAB(20,2*B+4);". ";
2140INPUT""A$(B)
2150FORA=1TO(22-(2*B+4));PRINT" ":NEXTA:PRINTCHR$(134
);"   Press (SPACE BAR) to play again"
2160IFGET$=" "THEN30
2170GOTO2160
```